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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,827	07/25/2001	Robert M. Blomquist	SP01-171	7152

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CORNING INCORPORATED
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EXAMINER

PAK, SUNG H

ART UNIT PAPER NUMBER

2874

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,827

Applicant(s)

BLOMQUIST, ROBERT M.

Examiner

Sung H. Pak

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 23-25 and 28-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detailed Action - Election Restriction

Art Unit: 2874

DETAILED ACTION

Election/Restrictions

The applicant has elected, without traverse, to prosecute the invention of group III, claims 23-34. Please refer to Detailed Action written by Examiner Sanza McClendon enclosed herewith.

Claim Objections

Claim 25 is objected to because of the following informalities: "the perfluorinated moiety" recited in line 1 lacks proper antecedent basis. Appropriate correction is required.

Claims 28-29 are objected to because of the following informalities: "the optical loss" in line 1 of claims 28 and 29 lack antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 23-25, 28-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Takezawa et al (US 5,093,888).

Takezawa et al reference discloses a low-loss optical device with all the limitations set forth in the claims, including: a polymeric material including thioether moieties in a concentration of at least 0.05 M (claim 4), and at least one at least partially halogenated moiety (claim 3), the halogenated moiety being $-(C_6F_4)-$ (claim 3), the optical device further comprising a polymeric overclad layer, a polymeric cladding layer and a substrate (Fig. 3).

Claims 23, 25 are rejected under 35 U.S.C. 102(a) as being anticipated by Matsuda et al (US 6,160,074).

Matsuda et al reference was cited in the information disclosure statement.

Matsuda et al reference discloses an optical device with all the limitations set forth in the claims, including: an optical element comprising thioether moieties of at least 0.05 M (column 5-6); at least one at least partially halogenated moiety (column 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24, 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al (US 6,160,074) in view of Takezawa et al (US 5,093,888).

Art Unit: 2874

Matsuda et al reference discloses an optical element with all the limitations set forth in the claims as discussed above, except it does not teach waveguide core, cladding and overlaid layer comprising the inventive optical element.

Takezawa et al reference, on the other hand, explicitly discloses the use of optical polymer materials in a planar waveguide arrangement (Fig. 3). Planar waveguide configuration provides a well known advantage of allowing for compact and reliable optical transmission device. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use optical element of Matsuda et al reference in a planar waveguide arrangement. It would have been desirable to have a compact and reliable optical transmission device.

Allowable Subject Matter

Claims 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior art references fairly teaches or suggests an optical element produced from composition comprising perfluoroethyleneoxy and perfluoromethyleneoxy backbone as claimed in claims 26-27, wherein the ration of perfluoroethyleneoxy and perfluoromethyleneoxy subunits range from 0.5 to 1 ~ 1.4:1.

Art Unit: 2874

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (703) 308-4880. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.

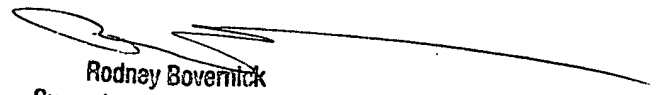
The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



sp
June 30, 2003

Sung H. Pak
Examiner
Art Unit 2874



Rodney Bovernick
Supervisory Patent Examiner
Technology Center 2800

Art Unit: 1711

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-19, drawn to energy curable composition, classified in class 522, subclass 180.
- II. Claims 20-22, drawn to polymeric material, classified in class 525, subclass 293.
- III. Claims 23-33, drawn to optical element, classified in class 385, subclass 143.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions they are not disclosed as capable of use together and they have different modes of operation, i.e. the composition of group I is an energy curable composition comprising di ethylenically unsaturated compounds and di thio compound, wherein one or the other is partially halogenated and the polymeric material contains thioether moieties in a 0.05 M concentration and is partially halogenated. The polymeric material is not disclosed as being useable in the composition of groups I, nor is it disclosed as being energy curable as in group I.

Art Unit: 1711

3. Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not disclosed as useable together and they can have different functions and/or effects. The composition of group I is not disclosed as being useable in the optical device, nor it required to be in an optical element as defined in Group III. The device of group III is not required to be energy curable as the composition of groups I.

4. Inventions II and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a coating for different substrates, such as metal or plastic and said polymeric material will lose its identity once it becomes apart of the optical device and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Art Unit: 1711

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II and/or III, restriction for examination purposes as indicated is proper.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

8. During a telephone conversation with Attorney Suggs on 9/20/2002 a provisional election was made without traverse to prosecute the invention of Group III, claims 23-33. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (703) 305-0505. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Application/Control Number: 09/912,827

Page 5

Art Unit: 1711

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0657.

Sanza L McClendon
Examiner
Art Unit 1711

SMc
September 22, 2002